



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,238	11/30/2003	James Gregory Stanley	5701-02263	1237
22428	7590	04/21/2005	EXAMINER	
FOLEY AND LARDNER				NGUYEN, VINCENT Q
SUITE 500				ART UNIT
3000 K STREET NW				PAPER NUMBER
WASHINGTON, DC 20007				2858

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/707,238	STANLEY ET AL.	
	Examiner Vincent Q. Nguyen	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 14 March 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Information Disclosure Statement***

1. The information disclosure statement filed 5/28/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

It is respectfully reminded that the documents mentioned above were not submitted in the parent case (09/866,885).

Applicant is required to submit the documents listed under "Other Prior Art" for them to be considered (IDS Page 1/15 and page 2/15 (On the IDS, it is numbered 5 and 6)).

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Howing (5,525,843).

Regarding claims 1, 13, Howing discloses a method of sensing occupant and occupant sensor in a seat comprising the steps of (figure 3) placing a heating element

(14) in said seat; placing a first electrode (The upper electrode of element 16) between heating element (14) and a seating region (The space between the backrest and the seat) of the seat; placing a second electrode (The lower electrode of element 16) between said heating element (14) (Element 14 is also electrode; See column 3, line 29) and the first electrode (15); providing for operatively coupling a first signal (20) to said first electrode (14); and providing for operatively coupling a second signal (20, 46) to said second electrode (15), wherein said first signal is an oscillating signal, and said second signal is substantially equal to said first signal (The first and second electrode receive signals from same source 20, it is substantially equal).

Regarding claim 7, Howing discloses a method of sensing occupant in a seat comprising the steps of (figure 3) placing a heating element (14) in said seat; placing a first electrode (The upper electrode of element 16) between heating element (14) and a seating region (The space between the backrest and the seat) of the seat; placing a second electrode (14) between said heating element (14) (Element 14 is also electrode; See column 3, line 29) and the first electrode (15); providing for operatively coupling a first signal (20) to said first electrode (14); and providing for operatively coupling a second signal (20, 46) to said second electrode (15), wherein said first signal is an oscillating signal, and said second signal is substantially equal to said first signal (The first and second electrode receive signals from same source 20, it is substantially equal); sensing a response to said first signal (column 4, lines 32-53).

Regarding claims 2, 8, 14, Howing discloses the step of placing an electrode (12) proximate to a side of said heating element (14) away from the seating region of said

seat; and providing for operatively coupling said second signal to said electrode (12) (The second signal is electric field or capacitively coupled to the electrode 12).

Regarding claims 3, 9, 15, Howing discloses said second electrode (14) comprises a sheath at least partially around at least a portion of said heating element (14) (Column 5, lines 10-15) (In fact, the limitations recited in the claim is true not only for the prior art of Howing but also true for every prior art of occupant sensing because if the heating element is not around by a sheath, the chair will be burned).

Regarding claims 4, 5, 10, 11, Howing discloses said first signal comprises AC coupling (Signal generated by the oscillating 20 is AC signal and is coupling to electrodes, it is AC coupling).

Regarding claim 6, Howing discloses the step of providing for sensing the occupant from a response to said first signal (Column 4, lines 50-53).

Regarding claims 12, 18, 19, Howing discloses the step of controlling the actuation (22, 40) of a safety restraint system responsive to said response to said first signal (Column 4, lines 32-59).

Regarding claim 16, Howing discloses at least one first capacitor (16) by which said first signal is operatively coupled.

Regarding claim 17, Howing discloses at least one second capacitor (Formed by electrode 14 and 12) by which said second signal is operatively coupled (The second signal is electric field or capacitively coupled to the electrode 12).

***Response to Arguments***

4. Applicant's arguments filed 3/14/2005 have been fully considered but they are not persuasive.

In response to Applicant's argument that: "Howing et al. does not disclose an apparatus having a heating element positioned in said seat, a first electrode located between said heating element and a second electrode located between said heating element and said first electrode."

Contrarily to Applicant argues, Howing et al. does disclose a heating element. In particular the heating element (14) positioned in said seat (Figure 3), a first electrode (Upper electrode of element 16) located between said heating element (14) and a second electrode (The lower electrode of element 16) located between said heating element (14) and said first electrode.

In response to Applicant argument that: "Howing et al. clearly does not disclose two electrodes positioned between a heating element and a seating region. Thus, the inventions of claims 1, 7 and 13 as amended are not disclosed and the rejection should be withdrawn."

It is clearly that Howing et al. discloses two electrodes (Element 16 have two electrodes, the upper and the lower electrode) (figure 3) positioned between a heating element (14) and a seating region (The seating region is the region between the two cushions) (The space between the backrest and the seat).

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Q. Nguyen whose telephone number is (571) 272-2234. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2858

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vincent Q. Nguyen  
Primary Examiner  
Art Unit 2858

V. Nguyen  
April 16, 2005